

**PRO200-4** 

(EUV Compliant)

50/60Hz Switchable Rating Prime Product 200 kVA / 160 kWe



### **KEY FEATURES**

#### **Rental Ready Features**

- Forklift pockets
- Fully certified dual point lifting
- Integrated heavy duty drag bar with robust skid plate
- Coolant & oil drains piped to baseframe
- EMC Certified
- Fully certified spark arresting silencer
- 50/60 Hz switchable frequency via terminal link
- Optimized cable entry for easy hook-up
- Sound isolated control panel with integrated power distribution access.
- Robust hook-up point for lugged cable connection
- AC protected by limit switch on distribution door
- Emergency stop on control panel and enclosure
- Inboard mounted 3 way fuel valve connection for external fuel connection

#### Engine

• Perkins 1206J-E70TTAG four-stroke diesel engine combines consistent performance and excellent fuel economy with minimal weight

#### **After Treatment**

• Diesel Emissions Fluid (DEF) Tank

#### Fuel / Emissions Strategy

• EUV complaince

#### **Single-Source Supplier**

• Factory designed and fully prototype tested with certified torsion vibration analysis available

#### • ISO 9001:2000 compliant facility

#### DeepSea Control Panel

- Simple user friendly interface and navigation
- Single point interface for voltage / frequency adjustment

#### Alternator

- Leroy Somer Alternator
- Coastal insulation protection
- Self (shunt) excitation

#### Integrated Voltage Regulator (IVR)

- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range.

#### Enclosure

- Galvanized sheet steel construction with two coat polyester powder-coated finish
- Five lockable (padlock / keylock) access doors for ease of maintenance
- Safety glass control panel viewing window with key lock
- Fuel fill and battery can only be reached through lockable access doors

#### **Reduced Environmental Impact**

- Dual wall base tank with 110% spill containment
- Bund Level alarm
- 75.1 dB sound pressure @ 75% load 1M
- 64.6 dB sound pressure @ 75% load 7M



## **STANDARD EQUIPMENT**

#### After Treatment

- Engine Mounted Clean Emissions Module (CEM)
- Diesel Emissions Fluid (DEF) Tank loctated in discharge box, accessable through lockable access door

#### **Air Inlet**

- Air cleaner with dust cup and service indicator
- Twin turbocharger and air-to-air aftercooler

#### Alternator

- LL5114F frame, three-phase, random wound, 12-lead design, self-excited, 2/3 pitch
- Coastal insulation protection

#### **Charging System**

· Charging alternator; 24V, heavy duty with integral regulator and belt guards

#### **Control Panel**

- DeepSea 7320 genset mounted digital controller
- 50/60Hz frequency switch via terminal link
- Panel mounted Emergency stop switch
- Automatic set-point adjustment integrated with voltage and frequency changes
- Integrated Voltage Regulator with EM10 Excitation Module
- Fully featured power metering, protective relaying and engine/generator control and monitoring

#### **Cooling System**

- Cooling package mounted radiator with vertical air discharge 50°C high ambient capability
- Variable speed pusher fan with guards
- Coolant drain line with internal brass ball control valve piped to base-frame
- Low coolant level shutdown.
- 50% coolant antifreeze with corrosion inhibitor

#### **Distribution System**

- Robust steel enclosure, separate hinged, lockable door with rust resistant pinned hinges
- Main circuit breaker 4-pole, 400A with 24V DC shunt trip wired to distribution door safety switch
- Two wire remote start/stop terminals and 230 VAC auxiliary power connection for rapid starting
- Cable support

#### Enclosure

- Sound attenuating, galvanized sheet metal enclosure with exceptional noise performance
- External emergency stop switch on enclosure
- Modular panel construction with a welded roof design
- · Interior walls, ceilings and ducts insulated with precision cut noise insulating materials
- Sealed quarter turn compression door latches with key and padlock capabilities
- Front and rear access provided though hinged doors
- External side mounted dual point lifting frame
- Enclosure is protected by powder coated white paint

#### Engine

- Perkins 1206J twin turbo heavy duty diesel engine
- · Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight

#### **Exhaust System**

• Integrated spark arresting silencer with flexible connectors, in separate compartment

#### **Fuel System**

- 217 gal (822 L) dual wall fuel tank, 25.4 hr runtime @ 75% prime rating, internal fuel fill
- Engine mounted primary fuel filter (10micron) with integral water separator and water in Fuel sensor
- Off engine mounted Racor fuel water separator (4 micron) with secondary engine mounted fuel water separator
- Manual Push Button priming pump.
- Auxiliary connections for customer supplied fuel transfer with 3 way fuel transfer system, internally mounted within the bunded area.
- Mechanical fuel gauge
- Electronic Fuel gauge with control panel display. Low level fuel warning & shutdown.
- Configurable bund level sensor. Low level warning & high level warning / shutdown.

#### Lube System

- On engine primary & secondary oil filters, filler and dipstick.
- Closed crankcase breather.
- 500 hour oil change intervals

#### **Mounting System**

- Generator set soft mounted using captive vibration mounts
- Heavy duty steel base frame contains integral dual wall fuel tank
- Provides 110% spill containment of all engine fluids
- Forklift pockets and heavy duty drag bar with skid plates

#### **Starting System**

• Single electric starting motor, 24V

#### General

- Factory testing of standard generator set
- Full manufacturer's warranty, O&M manuals

## **AVAILABLE OPTIONS**

- Socket box with integrated MCB & RCBO protection
- Synchronising control panel and motorised breakers
- Low voltage 60 Hz configuration including breaker and power cables
- Anti-condensation heater 230 VAC
- Coolant heater 230 VAC
- Air cleaner, two stage cyclonic/paper with dust cup and service indicator
- 2x 12V 950CCA maintenance free batteries with single pole battery isolator switch.
- 24V battery charger
- Permanent Magnet Generator (PMG)
- Earth Leakage
- CE labelling
- Lube oil sump pump
- 230 VAC anti-condensation heater option





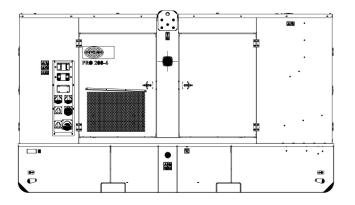
### **Power Ratings**

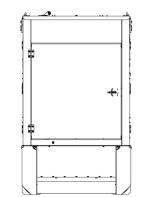
Frequency	Voltage	kVA	kW	Output Amps (A)	Breaker Rating (A)
	415/240V	200	160	278	
50 Hz	400/230V	200	160	289	400
	380/220V	190	152	289	
	480/277V	225	180	271	
	440/254V	225	180	295	400
60 Hz	380/220V	198	158	301	
	240/139V	-	-	-	
	220/127V	-	-	-	-

Ratings at 0.8 power factor.

Prime Rating: These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Power available at variable load with a load factor not exceeding 80% of the prime power rating in a 24 hour period.





### Weights & Dimensions

Length (mm)							4085
Width (mm)							1420
Height (mm)							2367
Weight - Lube Oil & Coolant (kg)					3651		
Weight - Lube	e Oil, Coolant	& Fuel (kg)					4487
Sockets	15A	16A	32A	50A	63A	125A	
CEE Form	_	2x1ph+N+E	2x3ph+N+E	_	1x3ph+N+E	1x3ph+N+E	



## PRO200-4 Technical Data

### **Generator Set Technical Data**

	Units	50 Hz	60 Hz
Power Rating	kW (kVA)	160 (200)	180 (225)
Oil pan capacity	L	17.1	17.1
Fuel consumption			
100% Load 75% Load 50% Load	L/hr	43.4 32.4 22.1	54.3 39.9 27.3
Fuel Tank Capacity	L	822	822
DEF Tank Capacity¥	L	34	
Running Time (75% Load)	Hrs	25	20
Ambeint Capability	°C	40	40
Engine & Radiator Coolant Capacity	L	33	33
Engine Coolant Capacity	L	13.2	13.2
Combustion Airflow	m3/min	12.6	14.2
Exhaust flow at rated – dry exhaust	m3/min	13.8	16.8
Exhaust temperature at rated kW	°C	480	480
Noise Rating		93.8	97.0
Sound Power*			
1m at 100% Load 7m at 100% Load	dB(A)	76.1 66.1	TBC TBC
1m at 75% Load 7m at 75% Load		75.1 64.6	TBC TBC

\*Guaranteed sound power as per 2000/14/EC

¥ DEF consumption is on average approximately 4% of the fuel consumption. DEF tank capacity is sufficient to last more than 24hrs when fully filled.



### Perkins 1206J Engine Data

Engine	1206J-E70TTAG
Bore – mm (in)	105 mm (4.13 in)
Stroke – mm (in)	135 mm (5.31 in)
Displacement – L (cu in)	7.0 L (428 in <sup>3</sup> )
Compression ratio	16.5:1
Engine RPM	1500 / 1800
Aspiration	Twin Turbocharged - Air to Air Aftercooled (TTA)
Aftercooler type	ATAAC
Turbocharger	Twin
Fuel system	Direct Injection
Governor Type	Electronic ECM controlled (A6E2)
Fuel specification	Ultra Low Sulphur Diesel Only (ULSD)
Oil specification	15W-40 CK-4
Diesel Exhaust Fluid	ISO22241-1

#### **Alternator Data**

Frame Size	LL5114F
Pitch	2/3
No of Poles	4
Exictation	Static regulated, brushless, self-excited
No of Bearings	Single bearing, close coupled
Insulation Class	Н
Temperature rise	125/40°C
Enclosure IP Rating	IP23
Overspeed Capability (% of rated)	25%
Voltage Regulator	3 phase sensing with adjustable Volts-per-Hz
Voltage regulation	Less than $\pm 0.5\%$
Telephone Harmonic Factor (THF)	Less than 2%
Total Harmonic Distortion (THD)	Less than 2%

\* Materials and specifications are subject to change without notice.

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